

Finding Solutions of Quadratics - Mixed Practice

A. State which method you are using (Graphing, Quadratic Formula, Factoring and Z.P.P. or taking square root)

B. Find the solutions. SHOW YOUR WORK!

1. $x^2 - 16x + 64 = 0$

2. $x^2 = 3x$

3. $9x^2 - 24x + 16 = 0$

4. $x^2 - 3x = 40$

5. $3x^2 + 9x - 2 = 0$

6. $2x^2 + 7x = 0$

7. $5x^2 - 2x + 4 = 0$

8. $12x^2 - x - 6 = 0$

9. $7x^2 + 6x + 2 = 0$

10. $12x^2 + 2x - 4 = 0$

11. $6x^2 - 2x - 1 = 0$

12. $x^2 + 3x + 6 = 0$

13. $4x^2 - 3x - 6 = 0$

14. $16x^2 - 8x + 1 = 0$

15. $2x^2 - 5x - 6 = 0$

16. $7x^2 - 5x = 0$

17. $4x^2 - 9 = 0$

18. $3x^2 + 8x = 3$

19. $x^2 - 21 = 4x$

20. $3x^2 - 13x + 4 = 0$

21. $15x^2 + 22x = -8$

22. $x^2 - 6x + 3 = 0$

23. $x^2 - 14x + 53 = 0$

24. $3x^2 = -54$

25. $25x^2 - 20x - 6 = 0$

26. $4x^2 - 4x + 17 = 0$

27. $8x - 1 = 4x^2$

28. $x^2 = 4x - 15$



29. $4x^2 - 12x + 7 = 0$

30. **GRAVITATION** The height $h(t)$ in feet of an object t seconds after it is propelled straight up from the ground with an initial velocity of 60 feet per second is modeled by the equation $h(t) = -16t^2 + 60t$. At what times will the object be at a height of 56 feet?

31. **STOPPING DISTANCE** The formula $d = 0.05s^2 + 1.1s$ estimates the minimum stopping distance d in feet for a car traveling s miles per hour. If a car stops in 200 feet, what is the fastest it could have been traveling when the driver applied the brakes?

DID YOU HEAR...

1.	2.	3.	4.	5.	6.	7.
8.	9.	10.	11.	12.	13.	14. ?

 Solve the equation. ~~Show work!~~ Write the word next to the answer in the box that contains the exercise number. 

1. $a^2 - 8a = -15$

2. $y^2 + 6y = 7$

3. $k^2 - 10 = 9k$

4. $w^2 = 13w$

5. $11x = -x^2 - 24$

6. $d^2 = 50 - 23d$

7. $3p^2 - 14p = 5$

8. $2m^2 + 14 = 11m$

9. $8 - 3t = 5t^2$

10. $16h^2 = 25$

11. $25b + 11 = -6b^2$

12. $36u = 9u^2$

13. $12q^2 = 17q + 5$

14. $9 = 12x - 4x^2$

$\{-5, -2\}$ CIRCUS

$\{0, 13\}$ OF

$\{\pm \frac{5}{4}\}$ SCARED

$\{2, \frac{7}{2}\}$ WHO

$\{3, 5\}$ THE

$\{-\frac{1}{4}, \frac{5}{3}\}$ DEATH

$\{-\frac{11}{2}, \frac{1}{3}\}$ BY

$\{-8, -3\}$ THE

$\{\frac{3}{2}\}$ TWICE

$\{-1, 10\}$ STORY

$\{4, 5\}$ JUMPED

$\{-\frac{8}{5}, 1\}$ WAS

$\{\frac{1}{3}, \frac{5}{4}\}$ HER

$\{-\frac{1}{3}, 5\}$ LADY

$\{0, 4\}$ TO

$\{1, -7\}$ SAD

$\{-12, 2\}$ CRAZY

$\{-\frac{11}{3}, -\frac{1}{2}\}$ HALF

$\{1, \frac{5}{3}\}$ CLOWN

$\{-25, 2\}$ UNFORTUNATE